To:

Distribution

From:

Roland Hea

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Meeting Date:

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Subject:

Meeting Minutes for OU 15 Phase I RFI/RI

Attendees:

Peter Bierbaum (ERM) John Haasbeek (ERM) Roland Hea (ERM) Amy Johnson (CDH)

Peter Sanford (KMI) Dennis Schubbe (EG&G) Jeff Swanson (CDH)

Jen Pepe (DOE)

Rich Ray (EG&G)

Greg Manning (EG&G)

David Maxwell (EPA)

1. Introduction

Mr. Dennis Schubbe began the meeting with some introductory remarks. Mr. Schubbe explained that the primary purpose of the meeting was to go through the decision logic presented in Section 6.0 of the preliminary version of OU 15 Phase I RFI/RI Technical Memorandum Number 1. Mr. John Haasbeek gave electronic copies of the current hot water rinsate database to Mr. David Maxwell and Mr. Jeff Swanson. Mr Schubbe explained that some of the radionuclide results from IHSS 204 had not been received yet, and therefore were not included on the data disks. Mr. Schubbe also indicated that analytical data for samples collected during a project to characterize drums of uranium oxide processed in the Original Uranium Chip Roaster should be available in the near future. Mr. Schubbe added that a construction excavation had been dug in Room 281 of Building 881, adjacent to Room 266B (IHSS 211). Mr. Schubbe said that the results from a soil sample collected from the excavation would be obtained to provide another data point for IHSS 211.

Review of Decision Logic for Additional Work 2.

Mr. Peter Bierbaum explained the proposed decision logic presented in Figure 6-1 of the preliminary Section 6.0 of Technical Memorandum Number 1. Mr. Bierbaum's detailed description of each box on the decision logic diagram is included below, along with comments made during the presentation.

Combined Stage I and II Characterization

Mr. Bierbaum stated that the data collected during the Stage I and II field investigations will be used to determine if Stage III sampling is necessary, and to evaluate whether an IHSS can be considered "clean closed", with no further action. Mr. Schubbe indicated that this approach was consistent with the requirements of the IAG.

Qualitative Evaluation of Release Potential

Mr. Bierbaum described the process used for the qualitative evaluation of release potential. Mr. Bierbaum said that the primary criteria in this evaluation was the presence of berms or other means of secondary containment for each IHSS. Mr. Bierbaum added that none of the OU 15 rooms met this criteria.

Direct Release Mechanisms

Mr. Bierbaum stated that IHSS 211 had the greatest potential for a direct release mechanism. Mr. Bierbaum said that it would be useful to tour the area with DOE, EPA and CDH to help determine if there is a need for Stage III field work for IHSS 211. Mr. Bierbaum suggested this tour should be conducted as soon as possible, hopefully during the following week. Mr. Bierbaum explained that prompt action would be necessary to complete Stage III field work in time to include the results in the Phase I RFI/RI Report. Mr. Swanson added that given all the data collected for OU 1, it did not make sense to do a lot of additional field work outside Building 881. Mr. Maxwell asked about the data from the building footing drain system. Mr. Schubbe said that reviewing this information would be useful. Mr. Schubbe also mentioned that drilling underneath Building 881 in the area of IHSS 211 would be difficult because of the slope of the ground and the presence of underground utilities.

Other Pathways (i.e., Tracking) - Gradient

Mr. Bierbaum explained the logic applied to determining if contamination had potentially migrated outdoors through an indirect pathway, such as tracking. Mr. Bierbaum said that the results of the hot water rinsate IHSS, perimeter and pathway samples would be compared to the screening levels and evaluated to see if a concentration gradient existed leading away from the IHSS. Mr Swanson said he would need to think about this approach, since he was not sure that the concentration of contaminants on the floor would necessarily reflect the amount of contamination potentially released to the outside. Ms. Jen Pepe agreed that there wasn't necessarily a connection between the two. Mr. Schubbe stated that the pathways would also need to be evaluated qualitatively.

Screening Levels - Clean Closure

Mr. Bierbaum presented the decision logic for comparing sampling results to screening levels to determine if an IHSS can be clean closed. Mr. Bierbaum stated that for chemical contamination, the sampling data will be compared to RCRA closure performance standards in accordance with the Work Plan. Mr. Bierbaum proposed that risk-based screening levels be used as the closure performance standards for the chemical constituents. With respect to radiological contamination, Mr. Bierbaum suggested that the sampling results be compared to the standards presented in Table 3.2 of the Work Plan.

Mr. Schubbe stated that if the radiological results did not meet the screening level criteria, a risk assessment could be conducted and presented in Technical Memorandum Number 2. Mr. Schubbe added that an indoor risk assessment for chemicals would not be performed. Mr. Schubbe explained that verification sampling is still an option, although it is not currently being proposed. Ms. Amy Johnson inquired why verification sampling was not a preferred alternative. In conjunction, Mr. Swanson asked if it was more cost effective to do risk assessment instead of verification sampling. Mr. Schubbe responded that was probably the case. Mr. Bierbaum suggested that verification sampling be kept as an option, although cost, schedule, waste generation, and data applicability issues should be considered before conducting additional sampling. Mr. Swanson agreed that the option should be left open, and added that when the decision point was reached, a recommendation should be made and presented to the regulatory agencies.

3. Comments on the Preliminary Sections of Technical Memorandum Number 1

Mr Schubbe said that the draft Technical Memorandum Number 1 would be submitted to DOE on February 22, 1994. Mr. Schubbe then proceeded to ask for comments on the preliminary sections of the technical memorandum which had been previously distributed.

Mr. Swanson and Ms. Johnson questioned the Section 5.0 assumption that the inhalation of dust was insignificant and should not be included in calculating the screening levels. Mr. Haasbeek responded that a factor for dust inhalation in an indoor setting had not been found yet, since the studies that had been reviewed did not differentiate between ingestion and inhalation. Mr. Haasbeek added that additional research would be completed to develop a factor for dust inhalation from indoor surfaces. Mr. Schubbe mentioned that the IHSSs were in controlled areas. Mr. Swanson said that for the purposes of risk assessment, the fact that the IHSSs were in controlled areas should not be considered. Mr. Schubbe suggested that if no published factors for dust concentrations in air could be found, perhaps plant data could be evaluated.

Mr. Maxwell asked why the OU 15 IHSSs should be clean closed, if they could potentially get recontaminated by general building operations. Mr. Swanson said that the units would still need to be closed out under RCRA, but could remain active under CERCLA. Mr. Maxwell thought it made sense to try to provide justification for no further action. Mr. Swanson added that some flexibility was available, as long as it remained protective of human health and the environment. Ms. Pepe commented that if an IHSS was closed out under OU 15 and later recontaminated, it would not be attributable to the historic operation of the IHSS, but instead would become part of the overall building D&D concern. Mr. Bierbaum said that perhaps other alternatives to a full-blown risk assessment could be found for units capable of being closed out for RCRA constituents, but not for radiological contamination. Mr. Schubbe added that those units could be transferred out of OU 15 and handled under a different mechanism.

Mr. Swanson commented on Table 5-1 of preliminary Section 5.0. Mr. Swanson said that the SA factor should include both the face and hands. Mr. Swanson also commented that a reference was needed for the ABS factor. Mr. Swanson asked why potting soil was chosen instead of clay for the AF factor. Mr. Haasbeek responded that dust inside the buildings was not cohesive in nature like a clay, and more closely resembled a potting soil. Mr. Swanson added that CDH risk assessment policy needs to be addressed, and that CDH had not accepted a risk level of 10⁻⁴. Mr. Swanson stated that Table 5-2 needed references, but otherwise looked good.

Ms. Johnson asked about the concentration of contaminants on a surface versus a concentration of that contaminant in dust. Ms. Johnson also inquired on how the shielding factor was derived. Mr. Haasbeek responded that in order to be conservative, no shielding was assumed.